

Fireworks Display Safety Class

Please see the instructions to this class before taking the following examination.

1. The person who has overall responsibility for the setup, conduct, firing, and fireworks safety of a display (both crew and public) is called the:

- A. Shooter
- B. Monitor
- C. Spotter
- D. Operator

2. The person responsible for crowd control is called the:

- A. Shooter
- B. Monitor
- C. Spotter
- D. Operator

3. The person responsible for igniting the fireworks is called the:

- A. Shooter
- B. Monitor
- C. Spotter
- D. Operator

4. The person responsible for observing the fireworks for proper functioning is called the:

- A. Shooter
- B. Monitor
- C. Spotter
- D. Operator

5. The word **shall** indicates a mandatory requirement.

- A. True
- B. False

6. The time between the ignition of a fuse at the tip and the firing of the shell shall be:

- A. More than three seconds
- B. Less than six seconds
- C. Both A and B
- D. None of the above

7. Salutes over 3 inches in diameter or over three inches long shall be permitted to be used only

- A. By licensed operators
- B. Under the direct control of a professional fireworks company.
- C. A or B
- D. Anyone

8. Single break aerial salute shells shall be preloaded into nonmetal mortars and may not be reloaded during the show.

- A. True
- B. False

9. As soon as fireworks are delivered to the display site,

- A. They must be constantly attended until they are ignited.
- B. Shall be kept dry.
- C. Unauthorized persons and the public must be kept at least 50 feet away
- D. All of the above

10. Assembly or repair of fireworks shall take place at least ____ feet away from bulk storage of fireworks.

- A. 25
- B. 50
- C. 100
- D. 200

11. Ready boxes must:

- A. Be portable and weather resistant.
- B. Protect the contents from burning or hot debris.
- C. Have a self closing cover
- D. All of the above

12. All mortars shall be carefully inspected for defects and suitability before placement.

- A. True
- B. False

13. Where mortars are to be reloaded during a display, mortars of various sizes shall not be intermixed. Mortars of the same size shall be placed in groups, and the groups shall be separated from each other.

- A. True
- B. False

14. Mortars shall be placed and spaced

- A. So shells are propelled away from spectators
- B. So shells are propelled over the fallout area
- C. To allow maximum protection to spectators and crew.
- D. All of the above.

15. Buried mortars shall be buried to a depth of at least 2/3 to 3/4 of their length either in the ground or in above ground troughs or drums and

- A. Be separated at least 2 inches or 1/2 the diameter of the mortar from the side of any trough or drum.
- B. Be separated from adjacent mortars at least the distance equal to the internal diameter of the mortar.
- C. Placed inside a plastic bag before burial if there is likelihood of moisture seeping in from the ground or sand.
- D. All of the above.

16. Mortars in racks or bundles:

- A. Shall be secured or braced to stabilize them using stakes, legs, A-frames, side-boards, or equivalent means.
- B. May not be larger than 6 inches inside diameter.
- C. Must only be used to fire single break shells.
- D. Shall be placed to maximize audience safety.
- E. All of the above

17. Chain fused shells require additional measures to prevent adjacent mortars from being repositioned in the event a shell explodes in a mortar.

- A. True
- B. False

18. Chain fused aerial shells shall not be permitted to be reloaded.

- A. True
- B. False

19. The display site does not contain

- A. The fallout area
- B. The discharge area
- C. The spectator viewing area
- D. The assembly area

20. The minimum size of the fallout area is determined by the size of the largest aerial shell to be fired.

- A. True
- B. False

21. The minimum radius from the center to the edge of the display area shall be 70 feet per inch of shell diameter of the largest aerial shell to be fired.

- A. True
- B. False

22. Distances from the center of the display area to any health care, detention, or correctional facility shall be double the minimum distances.

- A. True
- B. False

23. Distances from the mortar line to any bulk storage of materials having a flammability, explosive or toxic hazard shall be double the minimum distances.

- A. True
- B. False

24. The discharge area shall be located so that the trajectory of the shells shall not come within _____ feet of any overhead object.

- A. 25
- B. 50
- C. 100
- D. 150

25. Ground display pieces shall be located a minimum of 75 feet, and multi-shot devices and roman candles shall be located a minimum of 125 feet from spectators and spectator parking areas.

- A. True
- B. False

26. When mortars are to be placed vertically they shall be placed at or near the center of the display site.

- A. True
- B. False

27. Mortars shall be permitted to be angled and displaced from the center of the display site to allow for the wind to carry shells away from the main spectator viewing areas up to a distance of _____ from the center of the display site toward the main spectator viewing site.

- A. One fourth
- B. One third
- C. One half
- D. Two thirds

28. The mortars shall be angled so that any dud shells fall at a point approximately equal to the offset of the mortars from the center of the display site but in the opposite direction.

- A. True
- B. False

29. The fallout area shall be a large open area.

- A. True
- B. False

30. Which of the following is allowed in the fallout area while the display is being fired.

- A. spectators
- B. crew parking
- C. combustible materials
- D. none of the above

31. One or more spotters shall be assigned to watch the flight and behavior of aerial shells and other fireworks for proper functioning. If any unsafe condition is detected the spotter shall signal the shooter to cease firing until the unsafe condition is corrected. The spotters shall be in direct communication with the shooter during the conduct of the display.

- A. True
- B. False

32. Enforcement of crowd control is the sole duty of monitors.

- A. True
- B. False

33. No person shall be allowed in the discharge area while under the influence of _____ which could adversely affect judgment, mobility or stability.

- A. Alcohol
- B. Narcotics
- C. Medication
- D. Emotional distress
- E. Any of the above.

34. Aerial shells shall be carried only by their bodies and shall never be carried by their fuses.

- A. True
- B. False

35. Manually fired shells shall be ignited by lighting the tip of the fuse with a fusee, torch, portfire or similar device and as soon as the fuse is ignited

- A. The shooter shall stand there and watch
- B. The shooter shall vacate the immediate mortar area.
- C. The shooter shall yell fire in the hole!
- D. The shooter shall put out the ignition source.

36. All shells larger than 6 inches in diameter shall be preloaded into mortars prior to the beginning of the display and fired by electrical ignition or other means of remote ignition that place the shooter at least 75 feet away from the mortar or behind a sturdy barricade at the time of the ignition of the lift charge.

- A. True
- B. False

37. Following the display, the firing crew shall conduct an inspection of the fallout area for the purpose of locating any unexploded aerial shells or live components. This inspection shall be conducted before any public access to the site shall be permitted.

- A. True.
- B. False

38. When only electrical ignition is used, the operator and all assistants shall be positioned a minimum of ____ feet from any mortar or behind an approved protective barrier.

- A. 25
- B. 50
- C. 75
- D. 100

39. Manually operated electrical firing units shall be designed so that at least two positive actions shall be necessary to apply firing current to an electric match.

- A. True
- B. False

40. When fireworks are being loaded or set up electrical cables shall be disconnected from the firing unit.

- A. True
- B. False

Fireworks Display Safety Class Answer Sheet

NAME _____ DEPARTMENT _____
(Please Print)

	Answers		Answers
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2		22	
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